



## Sequences for the PCR Primers Used to Amplify SSR Loci in Soybean

These primers were developed by Perry Cregan (Soybean and Alfalfa Research Laboratory, USDA-ARS, Beltsville, MD) with extramural financial support from the United Soybean Board and the able technical assistance of Edward Fickus, Sarah Hyatt, Charles Quigley, Patrick Elia, Susan Fogarty, Jason Kenworthy, and Chris Lee. Any publications resulting from their use should reference the paper (Crop Science 1998 submitted) where they were first described.

### An Integrated Genetic Linkage Map of the Soybean

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PCR conditions for using these primers can be found [here](#).

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GMABAB GMENOD2B GMGLPSI2 GMRUBP SOYHSP176 SOYGPATR SOYLBC SOYN  
SOYPRP1 GMSC514 Scaa001 Scaa003

#### PCR Reagents for Soybean SSR Amplification

1. 30 ng genomic soybean DNA
2. Buffer:
  - o 50 mM KCl
  - o 10 mM Tris-HCl (pH 9.0 at 25° C)
  - o 0.1 % Triton X-100
3. 1.5 mM MgCl<sub>2</sub>
4. 0.15 mM for each of the NTPs
5. 1 unit Taq DNA Polymerase

#### Thermocycling Profile for Amplification of Soybean SSRs

1. 2 min at 95° C
2. 33 cycles of
  - o Denaturation: 92° C
  - o Annealing: 47° C
    - For better, but still specific amplification, 46° C will generally work quite well
  - o Extension: 68° C

Use equal times for denaturation, annealing, and extension. Time depends on PCR machine, volume of reaction, etc.